

U.S. Environmental Protection Agency (EPA Region 9) California Air Resources Board

Project Title: Imperial Valley and Mexicali Air Quality Alerts and Forecasting

Contact Information

CARB Technical Contact: Rebekka Fine

Tel: (916) 445-5516

Email: Rebekka.Fine@arb.ca.gov

OIS Project Manager: Patricia Roman

Tel: (916) 323-1043

Email: Patricia.Roman@arb.ca.gov

Administrative Contact: Jer Yang

Tel: (916) 445-1188

Email: Jer.Yang@arb.ca.gov

Funding

- Amount:
 - FY 18: \$100,000
 - FY 19: \$140,000
 - FY 21: \$105,000
- Reallocated Funding from Real-time Speciation:
 - FY 19: \$150,000
 - FY 20: \$12,000
- Completion Date: September 30, 2022

Project Overview

Imperial County is located in southeast California. The County is home to approximately 180,000 people and covers more than 4,280 square miles, making it the ninth largest county in California. The County's population is centered in and around its seven incorporated cities. Agricultural operations dominate much of the landscape and the economy. Mexicali, a large metropolitan area in Baja Mexico, borders Imperial County to the south. More than

1,000,000 people live in the Mexicali metropolitan area. The terrain and arid climate in the border region promote transport of primary emissions and production of secondary pollutants, which can lead to poor air quality conditions that impact residents of this region.

Imperial County has multiple air quality challenges. The County includes areas designated as a moderate nonattainment for the 2006 and 2012 PM_{2.5} National Ambient Air Quality Standards (NAAQS), moderate nonattainment for the 2008 ozone NAAQS, marginal nonattainment for the 2015 ozone NAAQS, and maintenance for the PM₁₀ NAAQS. Analyses for State Implementation Planning efforts have highlighted the role of international transport and climate conditions in these air quality challenges.

Five regulatory air monitoring sites are located in Imperial County. The California Air Resources Board (CARB) operates a site in Calexico. The Imperial County Air Pollution Control District (District) operates sites in Brawley, El Centro, Niland, and Westmorland. Monitoring sites are also located at the Universidad Autonoma de Baja California (UABC) and the Colegio de Bachilleres (COBACH) in Mexicali, Mexico. Various agencies and individuals use the data collected at these monitoring sites to assess the nature and extent of air pollution in the region, determine attainment with National and State ambient air quality standards, and evaluate pollutant transport.

Providing timely access to air quality data and information is important to residents of the Imperial County-Mexicali border region. The Imperial Valley and Mexicali Air Quality Alerts and Forecasting project has multiple components aimed at increasing public access to air quality data and information. These components include the following: a central website for real-time air quality data and information, air quality alert notifications, daily air quality forecasts, a mobile application for real-time air quality information, and monthly summary reports to CARB and the District.

The Imperial Valley Air website provides real-time air quality data from the regulatory monitoring sites in Imperial County and Mexicali, the real-time air quality index for each site, and advisories detailing health impacts of exposure to certain forms of air pollution as well as recommended measures to mitigate exposure. The website provides a link to sign up to receive daily air quality forecasts and air alerts via email. The website, daily forecasts, and air alerts are available in English and Spanish. The Imperial Valley Air mobile application is available for Apple and Android devices. The mobile application provides access to the same information found on the website as well as the daily air quality forecast summary. The contractor that maintains the website, mobile application, and forecast system prepares monthly summary reports for submittal to CARB and the District.

Changes to the Project Scope for 2021-2022

The current contract for project components detailed above extends through September 2021. A new contract will be prepared to continue the project through September 2022. Clean Air Act Part 105 funding approved for FY 2021-2022 will be used to fund the new

contract. The scope of work for the new contract will include the components detailed above, collection and reporting of website and mobile application use metrics to CARB to quantify the number of users for these tools, and an improved text narrative for the Air Quality and Health section of the website.

Project Justification

The components of this project provide meaningful information to a wide variety of stakeholders that include regulatory agencies, residents, community groups, and local health advocates. The use of web-based and mobile platforms, as well as provision of information in English and Spanish, helps reduce barriers to information access. Promoting a connected and informed community can assist with mitigating the health impacts of poor air quality in this border region.